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5/18/03  
D. BEN

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Yamazaki, et al. Art Unit: 2881  
Serial No.: 09/696,863 Examiner: Nikita Wells  
Filed : October 25, 2000 Confirmation No.: 2608  
Title : APPARATUS AND METHOD FOR DOPING

Commissioner for Patents  
Washington, D.C. 20231

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INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information  
Disclosure Statement and documents listed on form PTO-1449.

This filing is being made with an RCE. No fee is required.

English-language abstracts are provided where available.

Concise explanations are provided for the following references:

AM: JP 64-001455 discloses an ion source called Freeman  
type ion source, and discloses the extraction electrodes 10 and  
12 each having slits 10s and 12s for extracting an ion beam 14  
are provided in front of a slit 2s of a plasma generation  
chamber 2. Further, when an ion source gas or a metal steam is  
introduced into the plasma generation chamber 2 from holes 2a or  
2b, respectively, an arc discharge is generated between a

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filament 4 and the plasma generation chamber 2, and the ion beam 14 is extracted through the slits 2s, 10s and 12s.

The opponent asserts that each slit 2s, 10s and 12s has a rectangular shape, so that the ion beam 14 having a rectangular cross section is extracted.

AN: JP 06-060099 discloses an accelerating tube, and discloses that an ion beam 2 is accelerated through acceleration electrodes 4a-4c.

AO: M. Naito's article discloses an ion implantation apparatus using Freeman type ion source. The ion implantation apparatus has an electromagnet for a mass spectrometry. A mass analyzed ion beam passes a filter electrode and enters an acceleration tube for being accelerated to a required energy. A sample is put on a platen, and the platen, and the platen is driven at a speed corresponding to a beam amount by a servomotor, so that uniformity of the implantation is improved along the moving direction.

AP: N. Nagai's article discloses a parallel ion implantation apparatus using a collimator magnet. The collimator magnet is an electromagnet which generates a static magnetic field and bends a swept beam to form a parallel beam.

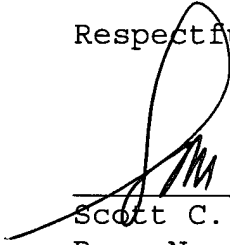
Consideration of the foregoing and enclosures plus the return of a copy of the enclosed form PTO-1449 with the


Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

Please apply any additional charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 04/23/03

  
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